

**SAFETY DATA SHEET****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

<b>Trade name or designation of the mixture</b>	B-220 Catalyst
<b>Registration number</b>	-
<b>Synonyms</b>	None.
<b>Product code</b>	903-0018
<b>Issue date</b>	19-September-2013
<b>Version number</b>	01
<b>Revision date</b>	15-November-2012
<b>Supersedes date</b>	15-November-2012

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

<b>Identified uses</b>	Industrial Leak Sealant
<b>Uses advised against</b>	None known.

**1.3. Details of the supplier of the safety data sheet****Supplier**

<b>Company name</b>	Team Industrial Services, Inc.
<b>Address</b>	Postbus 37 4380 AA Vlissingen 3237 The Netherlands
<b>Telephone</b>	+31 (0) 118 48 58 00 Fax +31 (0) 118 48 58 86
<b>e-mail</b>	Not available.
<b>Contact person</b>	Not available.

**1.4. Emergency telephone number** +1 703-527-3887

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

**Classification** Xi;R36/38, R43, N;R51/53

The full text for all R-phrases is displayed in section 16.

**Classification according to Regulation (EC) No 1272/2008 as amended****Health hazards**

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.

**Environmental hazards**

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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**Hazard summary**

<b>Physical hazards</b>	Not classified for physical hazards.
<b>Health hazards</b>	Irritating to eyes and skin. May cause sensitisation by skin contact.
<b>Environmental hazards</b>	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Specific hazards</b>	May cause sensitisation by skin contact. Irritating to skin. Irritating to eyes.
<b>Main symptoms</b>	Causes eye irritation. Symptoms include itching, burning, redness and tearing. Causes skin irritation. Symptoms may include redness, drying and cracking of the skin. May cause sensitisation by skin contact. May cause respiratory tract irritation. Ingestion may cause irritation and malaise.

**2.2. Label elements**

**Label according to Regulation (EC) No. 1272/2008 as amended****Contains:** Bisphenol A/ epichlorohydrin epoxy resin**Hazard pictograms****Signal word** Warning**Hazard statements**  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H317 - May cause an allergic skin reaction.  
H411 - Toxic to aquatic life with long lasting effects.**Precautionary statements****Prevention** P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
**Response** P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.  
**Storage** None.  
**Disposal** P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.**Supplemental label information** Contains epoxy constituents. May produce an allergic reaction.**2.3. Other hazards** Not a PBT or vPvB substance or mixture.**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Bisphenol A/ epichlorohydrin epoxy resin	70-100	25068-38-6 500-033-5	-	603-074-00-8	
<b>Classification:</b>		<b>DSD:</b> Xi;R36/38, R43, N;R51/53			
		<b>CLP:</b> Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Chronic 2;H411			

DSD: Directive 67/548/EEC.  
CLP: Regulation No. 1272/2008.**Composition comments** The full text for all R-phrases is displayed in Section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.**SECTION 4: First aid measures****General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.**4.1. Description of first aid measures****Inhalation** In case of discomfort, move to fresh air. Get medical attention, if needed.  
**Skin contact** Remove contaminated clothing. Wash immediately with soap and water for at least 15 minutes. Get medical attention promptly if symptoms persist or occur after washing. Discard contaminated shoes and clothing.  
**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.  
**Ingestion** Get medical attention if any discomfort occurs.**4.2. Most important symptoms and effects, both acute and delayed** Causes eye irritation. Symptoms include itching, burning, redness, and tearing of eyes. Causes skin irritation. Symptoms may include redness, drying and cracking of the skin. May cause sensitisation by skin contact.**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.**SECTION 5: Firefighting measures****General fire hazards** The product is not flammable. However: Will burn if strongly heated and when involved in fire.

### 5.1. Extinguishing media

**Suitable extinguishing media** Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable extinguishing media** Water may be ineffective.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Evacuate area and fight fire from a safe distance. Stop leak if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tanks due to fire.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Avoid contact with skin and eyes. For personal protection, see section 8.

**For emergency responders** Keep unnecessary personnel away.

**6.2. Environmental precautions** Prevent entry into waterways, sewer, basements or confined areas. Environmental manager must be informed of all major spillages.

**6.3. Methods and material for containment and cleaning up** Collect and dispose of spillage as indicated in Section 13. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Wipe up with absorbent material (e.g. cloth, fleece). Should not be released into the environment. Never return spills in original containers for re-use. Prevent product from entering drains.

**6.4. Reference to other sections** For personal protection, see section 8. For waste disposal, see section 13.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment.

**7.2. Conditions for safe storage, including any incompatibilities** Avoid heat, sparks, open flames and other ignition sources. Store in tightly closed original container. Store in a cool and well-ventilated place. Store away from incompatible materials.

**7.3. Specific end use(s)** Industrial Leak Sealant

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Occupational exposure limits** No exposure limits noted for ingredient(s).

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Not available.

### Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
Bisphenol A/ epichlorohydrin epoxy resin (CAS 25068-38-6)	Workers	Dermal	8,33 mg/kg/day	Acute Systemic effects
		Dermal	8,33 mg/kg/day	Long term Systemic effects
		Inhalation	12,25 mg/m <sup>3</sup>	Acute Systemic effects
		Inhalation	12,25 mg/m <sup>3</sup>	Long term Systemic effects

### Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Bisphenol A/ epichlorohydrin epoxy resin (CAS 25068-38-6)	Aqua (freshwater)	Not applicable	0,006 mg/l	
	Aqua (intermittent releases)	Not applicable	0,018 mg/l	
	Aqua (marine water)	Not applicable	0,0006 mg/l	
	Oral	Not applicable	11 mg/kg	
	Sediment (freshwater)	Not applicable	0,996 mg/l	
Sediment (marine water)	Not applicable	0,0996 mg/l		

Components	Type	Route	Value	Form
	Sewage Treatment Plant	Not applicable	10 mg/l	
	Soil	Not applicable	0,196 mg/l	

## 8.2. Exposure controls

**Appropriate engineering controls** General ventilation normally adequate. Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.

### Individual protection measures, such as personal protective equipment

**General information** Use personal protective equipment as required. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear approved chemical safety goggles. Use face shield in case of splash risk.

#### Skin protection

**- Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

**- Other** Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact chemical protective clothing manufacturer for specific information.

**Respiratory protection** No personal respiratory protective equipment normally required.

In case of inadequate ventilation, use respiratory protection. Use respiratory equipment with combination filter, type A2/P2.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls** Environmental manager must be informed of all major spillages.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Colourless liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Slight.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	> 260 °C (> 500 °F)
<b>Flash point</b>	> 110 °C (> 230 °F)
<b>Evaporation rate</b>	Very slow.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	0,03 mm Hg
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	1,16 - 1,19 (Water=1) at 25°C (77°F)
<b>Solubility(ies)</b>	Slightly soluble (in water).
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.

**9.2. Other information** No relevant additional information available.

## SECTION 10: Stability and reactivity

**10.1. Reactivity** The product is stable and non reactive under normal conditions of use, storage and transport.

**10.2. Chemical stability** The product is stable under normal conditions of use, storage and transport.

**10.3. Possibility of hazardous reactions** Hazardous polymerisation does not occur.

**10.4. Conditions to avoid** Exposure to heat and contact with sources of ignition. Contact with incompatible materials.

**10.5. Incompatible materials** Strong oxidising agents. Strong acids. Amines. Strong alkalis.

**10.6. Hazardous decomposition products** During combustion: Carbon oxides. Chlorine compounds.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

**Ingestion** Ingestion may cause irritation and malaise. May be harmful if swallowed.

**Inhalation** May cause irritation of nose, throat and mucous membranes.

**Skin contact** Causes skin irritation. Prolonged contact may cause redness, irritation and dry skin. May cause sensitisation by skin contact.

**Eye contact** Causes eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Symptoms** Skin. Causes skin irritation. Symptoms may include redness, drying and cracking of the skin. Sensitisation.

Eyes. Causes eye irritation. Contact may cause irritation with redness, tearing and pain.

### 11.1. Information on toxicological effects

**Acute toxicity** Causes skin and eye irritation.

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/irritation** Not available.

**Respiratory sensitisation** Not available.

**Skin sensitisation** Not available.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** Not available.

**Reproductive toxicity** Not classified.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Not available.

**Aspiration hazard** Not classified.

**Mixture versus substance information** Not available

**Other information** Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components	Species	Test results	
Bisphenol A/ epichlorohydrin epoxy resin (CAS 25068-38-6)			
Fish	LC50	Salmo gairdneri	1,5 mg/l, 96 hours
<b>Aquatic</b>			
Crustacea	EC50	Daphnia magna	2,7 mg/l, 48 hours

**12.2. Persistence and degradability** Expected to be persistent.

**12.3. Bioaccumulative potential** The product is not expected to bioaccumulate.

**Partition coefficient n-octanol/water (log Kow)** Not available.

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** Not available.

**12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** Toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**EU waste code** Not available.

**Disposal methods/information** Dispose in accordance with all applicable regulations. Do not allow runoff to sewer, waterway or ground.

## SECTION 14: Transport information

### ADR

**14.1. UN number** UN3082

**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/ epichlorohydrin epoxy resin)

**14.3. Transport hazard class(es)** 9

**Subsidiary class(es)** -

**14.4. Packing group** III

**14.5. Environmental hazards** No

**Tunnel restriction code** Not available.

**Labels required** 9

**14.6. Special precautions for user** Not available.

### RID

**14.1. UN number** UN3082

**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/ epichlorohydrin epoxy resin)

**14.3. Transport hazard class(es)** 9

**Subsidiary class(es)** -

**14.4. Packing group** III

**14.5. Environmental hazards** No

**Labels required** 9

**14.6. Special precautions for user** Not available.

### ADN

**14.1. UN number** UN3082

**14.2. UN proper shipping name** Environmentally Hazardous Liquid, N.o.s.

**14.3. Transport hazard class(es)** 9

**Subsidiary class(es)** -

**14.4. Packing group** III

**14.5. Environmental hazards** No

**Labels required** 9

**14.6. Special precautions for user** Not available.

### IATA

**14.1. UN number** UN3082

**14.2. UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/ epichlorohydrin epoxy resin)

**14.3. Transport hazard class(es)** 9

**Subsidiary class(es)** -

**14.4. Packing group** III

**14.5. Environmental hazards** Not available.

**Labels required** Not available.

**ERG Code** 9L

**14.6. Special precautions for user** Not available.

## IMDG

<b>14.1. UN number</b>	UN3082
<b>14.2. UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/ epichlorohydrin epoxy resin), Marine pollutant
<b>14.3. Transport hazard class(es)</b>	9
<b>Subsidiary class(es)</b>	-
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Labels required</b>	Not available.
<b>EmS</b>	F-A, S-F
<b>14.6. Special precautions for user</b>	Not available.
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	This substance/mixture is not intended to be transported in bulk.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

#### Other EU regulations

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Bisphenol A/ epichlorohydrin epoxy resin (CAS 25068-38-6)

**Directive 94/33/EC on the protection of young people at work**

Bisphenol A/ epichlorohydrin epoxy resin (CAS 25068-38-6)

#### Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

**National regulations** Not available.

**15.2. Chemical safety assessment** Not available.

## **SECTION 16: Other information**

**List of abbreviations** Not available.

**References** Not available.

**Information on evaluation method leading to the classification of mixture** Not available.

**Full text of any statements or R-phrases and H-statements under Sections 2 to 15**

R36/38 Irritating to eyes and skin.  
R43 May cause sensitisation by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H411 - Toxic to aquatic life with long lasting effects.

**Training information** Not available.

**Disclaimer** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.